

OTTER TAIL POWER COMPANY
Docket No: EL22-025

Response to: SD Public Utilities Commission
Analyst: Brittany Mehlhaff
Date Received: October 07, 2022
Date Due: October 24, 2022
Date of Response: November 15, 2022
Responding Witness: Stuart Tommerdahl, Manager, Regulatory Administration, 218 739-8279

Data Request:

How much of an increase in LMP's at the Hoot Lake node would be necessary to cause a shift in the economic analysis supporting Otter Tail's decision to allocate the Hoot Lake Solar project 100% to Minnesota instead of sharing across the system?

Attachments: 0

Response:

SUPPLEMENTAL RESPONSE

This response includes information Otter Tail deems to be Confidential Information under ARSD 20:10:01:39 and is provided on the condition that it is not filed or otherwise publicly disclosed pending a determination under ARSD 20:10:01:41 and 20:10:01:42, or an agreement by the parties to this proceeding regarding its disclosure. Such Confidential Information is marked "CONFIDENTIAL" and noted where applicable as [PROTECTED DATA BEGINS... ..PROTECTED DATA ENDS].

Otter Tail updates its response to this data request to clarify certain elements of Otter Tail's proposal in this Docket. Absent the adjustment Otter Tail is proposing, revenue attributable to Hoot Lake Solar's output would be included in Otter Tail's system costs, thereby reducing the overall costs included in the Energy Adjustment Rider (EAR or Fuel Clause Adjustment (FCA)) calculations.

The value of that FCA benefit to South Dakota customers would increase as the value from increased Locational Marginal Prices (LMPs) of the avoided cost (MISO revenue) attributable to the Hoot Lake Solar facility increases. Only at the point where that benefit exceeds the \$600,000 revenue requirement associated with South Dakota's share of that facility (if allocated) would customers exceed the breakeven point. The average LMP would need to be approximately [PROTECTED DATA BEGINS... ..PROTECTED DATA ENDS]¹ for the entire year to hit that breakeven point. Anything below \$600,000 in FCA benefit would still effectively increase costs to South Dakota customers if they were paying for the facility.

¹ Calculated by taking \$600,000 divided by the projected Hoot Lake annual output.

The tables below help illustrate the mechanics of what Otter Tail is proposing in this filing, by bringing South Dakota customer’s share of overall costs in the FCA back to a point that equates to not having the Hoot Lake Solar facility in the FCA calculation, which in these examples is \$10,000,000.

Revenue Requirement & FCA Benefit			Proposal for SD		
HLS Revenue Requirement	\$	600,000		HLS Revenue Requirement	\$ -
Total System FCA Costs excl. HLS MISO Revenue		\$10,000,000		Total System FCA Costs excl. HLS MISO Revenue	\$ 10,000,000
Fuel Clause Benefits (HLS Revenue)	\$	(200,000)		Fuel Clause Benefits (HLS Revenue)	\$ (200,000)
Adjustment to remove HLS revenue from FCA Calc		0		Adjustment to remove HLS revenue from FCA Calc	\$ 200,000
Net Impact to Customers	\$	10,400,000	or	Net Impact to Customers	\$ 10,000,000

Revenue Requirement & FCA Benefit			Proposal for SD		
HLS Revenue Requirement	\$	600,000		HLS Revenue Requirement	\$ -
Total System FCA Costs excl. HLS MISO Revenue		\$10,000,000		Total System FCA Costs excl. HLS MISO Revenue	\$ 10,000,000
Fuel Clause Benefits (HLS Revenue)	\$	(300,000)		Fuel Clause Benefits (HLS Revenue)	\$ (300,000)
Adjustment to remove HLS revenue from FCA Calc		0		Adjustment to remove HLS revenue from FCA Calc	\$ 300,000
Net Impact to Customers	\$	10,300,000	or	Net Impact to Customers	\$ 10,000,000

Revenue Requirement & FCA Benefit			Proposal for SD		
HLS Revenue Requirement	\$	600,000		HLS Revenue Requirement	\$ -
Total System FCA Costs excl. HLS MISO Revenue		\$10,000,000		Total System FCA Costs excl. HLS MISO Revenue	\$ 10,000,000
Fuel Clause Benefits (HLS Revenue)	\$	(400,000)		Fuel Clause Benefits (HLS Revenue)	\$ (400,000)
Adjustment to remove HLS revenue from FCA Calc		0		Adjustment to remove HLS revenue from FCA Calc	\$ 400,000
Net Impact to Customers	\$	10,200,000	or	Net Impact to Customers	\$ 10,000,000

Revenue Requirement & FCA Benefit			Proposal for SD		
HLS Revenue Requirement	\$	600,000		HLS Revenue Requirement	\$ -
Total System FCA Costs excl. HLS MISO Revenue		\$10,000,000		Total System FCA Costs excl. HLS MISO Revenue	\$ 10,000,000
Fuel Clause Benefits (HLS Revenue)	\$	(600,000)		Fuel Clause Benefits (HLS Revenue)	\$ (600,000)
Adjustment to remove HLS revenue from FCA Calc		0		Adjustment to remove HLS revenue from FCA Calc	\$ 600,000
Net Impact to Customers	\$	10,000,000	or	Net Impact to Customers	\$ 10,000,000

ORIGINAL RESPONSE

A rudimentary analysis would conclude if the fuel cost savings associated with Hoot Lake Solar were greater than half the project revenue requirement, it would be overall more cost-effective to pay the revenue requirements associated with the project while also gaining the savings in fuel costs. On the flip-side, if the fuel cost savings associated with Hoot Lake Solar were less than half the project revenue requirement, it would be overall more cost-effective to pay the avoided cost of purchased power than paying for the revenue requirements associated with the project.

Otter Tail’s response to IR SD-PUC-1.04 included an estimated Hoot Lake Solar project South Dakota share revenue requirement of \$600,000 (If Hoot Lake Solar was recovered through a rider mechanism such as the South Dakota Phase-In Rider). This estimate incorporates known impacts from the Inflation Reduction Act, specifically a 40% investment tax credit. Using the above logic, it would be more cost effective for South Dakota customers to pay for the Hoot Lake Solar project revenue requirements (and gain corresponding fuel cost benefits) if fuel cost benefits were greater than \$300,000. The forecasted Otter Tail load zone Locational Marginal Prices (LMPs) included in Attachment 3 to IR SD-PUC-1.05, when incorporated into Otter Tail’s EnCompass (fuel forecast) modelling, resulted in estimated avoided market purchases

(fuel cost benefits) of approximately \$290,000 (Attachment 1 to IR SD-PUC-1.05, Line 8). Therefore, monthly LMPs at the Hoot Lake node will need to be slightly higher or greater than those included in Attachment 3 to IR SD-PUC-1.05 for the net fuel savings from Hoot Lake Solar to justify paying the revenue requirement associated with Hoot Lake Solar.